General Astrophysics with Darwin/TPF

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NASA's Terrestrial Planet Finder (TPF) and ESA's Darwin Interferometer (Darwin) will provide orders of magnitude improvements in angular resolution in the 5 to 20 micron wavelength range over current ground-based or space-based telescopes at a sensitivity similar to JWST. In this contribution we will describe the foreseen scientific capabilities of the Darwin/TPF mission and discuss the dramatic impact that Darwin/TPF will have on almost all areas of astrophysics. These areas include Solar System, the circumstellar environments of young, mature, and dying stars, the formation and maturation of stars and their planetary systems, mass recycling, the birth of star clusters in nearby galaxies, the circum-nuclear environments of galaxies, the evolution of black holes, and the formation and evolution of galaxies.